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Fee: \$36.00  
Pages: 1

Suzanne Henderson

PAID UP OIL AND GAS LEASE

THIS LEASE AGREEMENT is made as of the 9 day of February, 2008, between Philip C. Armstrong and Amanda L. Armstrong, husband and wife, as Lessor and CARRIZO OIL & GAS, INC., 1000 Louisiana Street, Suite 1500, Houston, Texas 77002, as Lessee. All printed portions of this lease were prepared by the party hereinabove named as Lessee, but all other provisions including the completion of blank spaces, were prepared jointly by Lessor and Lessee.

1. Description. In consideration of a cash bonus in hand paid and the covenants herein contained, Lessor hereby grants, leases and lets exclusively to Lessee the following described land, hereinafter called "leased premises".

SEE EXHIBIT "A" ATTACHED HERETO FOR DESCRIPTION OF LEASED PREMISES

In the County of Tarrant, State of Texas, containing 0.153739 acres, more or less, (including any interests therein which Lessor may hereafter acquire by reversion, prescription or otherwise), for the purpose of exploring for, developing, producing and marketing oil and gas along with all hydrocarbon and non-hydrocarbon substances produced in association herewith. The term "gas" as used herein includes helium, carbon dioxide, gaseous sulfur compounds, coalbed methane and other commercial gases, as well as a normal hydrocarbon gases. In addition to the above-described land, this lease and the term "leased premises" also covers accretions and any small strips or parcels of land now or hereafter owned by Lessor which are contiguous or adjacent to the above-described land, and, in consideration of the aforementioned cash bonus, Lessor agrees to execute at Lessee's request any additional or supplemental instruments for a more complete or accurate description of the land so covered. For the purpose of determining the amount of any payments based on acreage hereunder, the number of gross acres above specified shall be deemed correct, whether actually more or less.

2. Term of Lease. This lease, which is a "paid-up" lease requiring no rentals, shall be in force for a primary term of **Three (3) years** from the date hereof, and for as long thereafter as oil or gas or other substances covered hereby are produced in paying quantities from the leased premises or from lands pooled therewith or this lease is otherwise maintained in effect pursuant to the provisions hereof.

3. Royalty Payment. Royalties on oil, gas and other substances produced and saved hereunder shall be paid by Lessee to Lessor as follows: (a) For oil and other liquid hydrocarbons separated at Lessee's separator facilities, the royalty shall be **One-Quarter (1/4)** of such production, to be delivered at Lessee's option to Lessor at the wellhead or to Lessor's credit at the oil purchaser's transportation facilities, provided that Lessee shall have the continuing right to sell such production to itself or an affiliate at the wellhead market price then prevailing in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) for production of similar grade and gravity; (b) for gas (including casinghead gas) and all other substances covered hereby, the royalty shall be **One-Quarter (1/4)** of the proceeds realized by Lessee from the sale thereof, provided that Lessee shall have the continuing right to sell such production to itself or an affiliate at the prevailing wellhead market price for production of similar quality in the same field (or if there is no such price then prevailing in the same field, then in the nearest field in which there is such a prevailing price) pursuant to comparable purchase arrangements entered into on the same or nearest preceding date as the date on which Lessee or its affiliate commences its purchases hereunder; and (c) in calculating royalties on production hereunder, Lessee may deduct Lessor's proportionate part of any production and excise taxes. If at the end of the primary term or any time thereafter one or more wells on the leased premises or lands pooled therewith are capable of producing oil or gas or other substances covered hereby in paying quantities, but such well or wells are either shut in or production therefrom is not being sold by Lessee, such well or wells shall nevertheless be deemed to be producing in paying quantities for the purpose of maintaining this lease. If for a period of 90 consecutive days such well or wells are shut in or production therefrom is not being sold by Lessee, then Lessee shall pay an aggregate shut-in royalty of ten dollars per net mineral acre then covered by this lease, such payment to be made to Lessor on or before the end of said 90-day period and thereafter on or before each anniversary of the end of said 90-day period while the well or wells are shut in or production therefrom is not being sold by Lessee; provided that if this lease is otherwise being maintained by operations, or if production is being sold by Lessee from another well or wells on the leased premises or lands pooled therewith, no shut-in royalty shall be due until the end of the 90-day period next following cessation of such operations or production. Lessee's failure to properly pay shut-in royalty shall render Lessee liable for the amount due, but shall not operate to terminate this lease. Lessee may not maintain this lease in effect solely by the payment of shut in royalties for (i) any one period of more than Two (2) consecutive years or (ii) for shorter periods during times all wells are actually and physically shut in from time to time not exceeding five (5) years in the aggregate.

4. Shut-in Payment. All shut-in royalty payments under this lease shall be paid or tendered directly to Lessor at the above address, or its successors, regardless of changes in the ownership of said land. All payments or tenders may be made in currency, or by check or by draft and such payments or tenders to Lessor by deposit in the U.S. Mails in a stamped envelope addressed to the Lessor at the last address known to Lessee shall constitute proper payment.

5. Operations. If Lessee drills a well which is incapable of producing in paying quantities (hereinafter called "dry hole") on the leased premises or lands pooled therewith, or if all production (whether or not in paying quantities) permanently ceases from any cause, including a revision of unit boundaries pursuant to the provisions of Paragraph 6 or the action of any governmental authority, then in the event this lease is not otherwise being maintained in force it shall nevertheless remain in force if Lessee commences operations for reworking an existing well or drilling operations for an additional well or for otherwise obtaining, restoring or increasing production on the leased premises or lands pooled therewith within 90 days after completion of operations on such dry hole or within 90 days after such cessation of all production. If at the end of the primary term, or at any time thereafter, this lease is not otherwise being maintained in force but Lessee is then engaged in drilling, reworking or any other operations reasonably calculated to obtain, restore or increase production therefrom, this lease shall remain in force so long as any one or more of such operations are prosecuted with no interruption of more than 90 consecutive days, and if any such operations result in the production of oil or gas or other substances covered hereby, as long thereafter as there is production in paying quantities from the leased premises or lands pooled therewith. After completion of a well capable of producing in paying quantities hereunder, Lessee shall drill such additional wells on the leased premises or lands pooled therewith as a reasonably prudent operator would drill under the same or similar circumstances to (a) develop the leased premises as to reservoirs then capable of producing in paying quantities on the leased premises or land pooled therewith, or (b) protect the leased premises from uncompensated drainage by any well or wells located on other lands not pooled therewith. There shall be no covenant to drill exploratory wells or any additional wells except as expressly provided herein.

6. Pooling. Lessee shall have the right, but not the obligation to pool all or any part of the leased premises or interest therein with any other lands or interests, as to any or all depths or zones, and as to any or all substances covered by this lease, either before or after the commencement of drilling or production whenever Lessee deems it necessary or proper to do so in order to prudently develop or operate the leased premises, whether or not similar pooling authority exists with respect to such other lands or interests. The creation of a unit by such pooling shall be based on the following criteria (hereinafter called "pooling criteria"): A unit for an oil well (other than a horizontal) shall not exceed 40 acres plus a maximum acreage tolerance of 10%, and for a gas well or a horizontal completion shall not exceed 640 acres plus a maximum acreage tolerance of 10%; provided that a larger unit may be formed for an oil well or gas well or horizontal completion to conform to any well spacing or density pattern that may be prescribed or permitted by any governmental authority having jurisdiction to do so. For the purposes of the foregoing, the terms "oil well" and "gas well" shall have the meanings prescribed by applicable law or the appropriate governmental authority, or if no definition is so prescribed, "oil well" means a well with an initial gas-oil ratio of less than 100,000 cubic feet per barrel and "gas well" means a well with an initial gas-oil ratio of 100,000 cubic feet or more per barrel, based on a 24-hour production test conducted under normal producing conditions using standard lease separator facilities or equivalent testing equipment; and the term "horizontal completion" means an oil or gas well in which the horizontal component of the gross completion interval in the reservoir exceeds the vertical component thereof. In



**Project: River Trails**

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exercising its pooling rights hereunder, Lessee shall file of record a written declaration describing the unit and stating the effective date of pooling. Production, drilling or reworking operations anywhere on a unit which includes all or any part of the leased premises shall be treated as if it were production, drilling or reworking operations on the leased premises, except that the production on which Lessor's royalty is calculated shall be that proportion of the total unit production which the net acreage covered by this lease and included in the unit bears to the total gross acreage in the unit, but only to the extent such proportion of unit production is sold by Lessee. In the event a unit is formed hereunder before the unit well is drilled and completed, so that the applicable pooling criteria are not yet known, the unit shall be based on the pooling criteria Lessee expects in good faith to apply upon completion of the well; provided that within a reasonable time after completion of the well the unit shall be revised if necessary to conform to the pooling criteria that actually exists. Pooling in one or more instances shall not exhaust Lessee's pooling rights hereunder and Lessee shall have the recurring right but not the obligation to revise any unit formed hereunder by expansion or contraction or both, either before or after commencement of production, in order to conform to the well spacing or density pattern prescribed or permitted by the governmental authority having jurisdiction, or to conform to any productive acreage determination made by such governmental authority. To revise a unit hereunder, Lessee shall file of record a written declaration describing the revised unit and stating the effective date of revision. To the extent any portion of the leased premises is included in or excluded from the unit by virtue of such revision, the proportion unit production on which royalties are payable hereunder shall thereafter be adjusted accordingly. In the absence of production in paying quantities from a unit, or upon permanent cessation thereof, Lessee may terminate the unit by filing of record a written declaration describing the unit and stating the date of termination. Pooling hereunder shall not constitute a cross-conveyance of interests.

**7. Payment Reductions.** If Lessor owns less than the full mineral estate in all or any part of the leased premises, the royalties, and shut-in royalties payable hereunder for any well on any part of the leased premises or land pooled therewith shall be reduced to the proportion that Lessor's interest in such part of the leased premises bears to the full mineral estate in such part of the leased premises. To the extent any royalty or other payment attributable to the mineral estate covered by the lease is payable to someone other than Lessor, such royalty or other payment shall be deducted from the corresponding amount otherwise payable to Lessor hereunder.

**8. Ownership Changes.** The interest of either Lessor or Lessee may be assigned, devised or otherwise transferred in whole or in part by area and/or by depth or zone, and the rights and obligations of the parties hereunder shall extend to their respective heirs, devisees, executors, administrators, successors and assigns. No change in Lessor's ownership shall have the effect of reducing the rights or enlarging the obligations of Lessee hereunder, and no change in ownership shall be binding on Lessee until sixty days after Lessee has been furnished the original or duly authenticated copies of the documents establishing such change of ownership to the satisfaction of Lessee or until Lessor has satisfied the notification requirements contained in Lessee's usual form of division order. In the event of the death of any person entitled to shut-in royalties hereunder, Lessee may pay or tender such shut-in royalties to the credit of decedent or decedent's estate at the address designated above. If at any time two or more persons are entitled to shut-in royalties hereunder, Lessee may pay or tender such shut-in royalties to such persons, either jointly, or separately in proportion to the interests which each owns. If Lessee transfers its interest hereunder in whole or in part, Lessee shall be relieved of all obligations hereafter existing with respect to the transferred interests, and failure of the transferee to satisfy such obligations with respect to the transferred interests, shall not affect the rights of Lessee with respect to any interests not so transferred. If Lessee transfers a full or undivided interest in all or any portion of the area covered by this lease, the obligation to pay or tender shut-in royalties hereunder shall be divided between Lessee and the transferee in proportion to the net acreage interest in this lease then held by each.

**9. Release of Lease.** Lessee may, at any time and from time to time deliver to Lessor and file of record a written release of this lease as to a full or undivided interest in all or any portion of the area covered by this lease or any depths or zones thereunder, and shall thereupon be relieved of all obligations thereafter arising with respect to the interest so released. If Lessee releases less than all of the interest or area covered hereby, Lessee's obligation to pay or tender shut-in royalties shall be proportionately reduced in accordance with the net acreage interest retained hereunder.

**10. Ancillary Rights.** No well shall be located less than 600 feet from any house or commercial building now on the leased premises without Lessor's consent, and Lessee shall pay for damage caused by its operations to buildings and other improvements now on the leased premises.

**11. Non-Surface Limitation.** Lessee shall not conduct any surface operations upon any part of the surface of the leased premises. Lessee shall, however, have a sub-surface easement to horizontally drill under the surface of the leased premises. Notwithstanding anything contained herein to the contrary, Lessee shall have the right to conduct seismic operations, but only by utilizing the vibroseis-method.

**12. Environmental Safeguards.** Lessee shall employ such measures as will reduce the impact of its operations upon improvements, vegetation and habitat on the leased premises. Lessee shall use reasonable care and safeguards in conducting its operations in or under the leased premises to prevent contamination or pollution from any waste, pollutant, or contaminant to any environmental medium, including soil, surface waters, groundwater, sediments, surface or subsurface strata, ambient air, or any other environmental medium in, on, or under the leased premises. Lessee shall remediate any condition which is hazardous to humans or wildlife resulting from Lessee's operations in or under the leased premises.

**13. Visual Appearance.** Lessee shall not permit the disposal of trash, storage of used equipment or other such materials on the well sites and shall maintain the well sites in a neat and orderly fashion. Lessee shall construct or improve necessary lease roads as all weather roads and shall maintain such roads in a good state of condition and repair in order to prevent excess dust and erosion and maintain the continuity of the surrounding environment. For safety and appearance, Lessee shall install appropriate fences around each well and related facilities in a visually appealing manner in an effort to maintain the continuity of the surrounding area, and shall maintain the fences in a good state of repair. Upon conclusion of Lessee's drilling and completion operations, Lessee shall restore that portion of the well site not being utilized by Lessee for producing operations as nearly as is reasonably practicable to its original state. In addition, Lessee shall maintain the well sites in a manner whereby they shall be free of noxious vegetation and debris resulting from Lessee's operations. Upon lease expiration, Lessee shall remove all of Lessee's equipment and restore the surface of the ground as nearly as is reasonably practicable to its original state.

**14. Groundwater Protection.** Any oil or gas wells drilled by Lessee shall be drilled in compliance with the surface casing requirements imposed by the State of Texas for groundwater protection and Lessee shall install such surface casing in the required manner in order to insure the protection of all fresh water bearing formations in and under the leased premises.

**15. Noise Abatement and Safety.** Lessee shall utilize modern equipment with appropriate safeguards in its drilling, completion and producing operations. Whenever possible, Lessee shall install sound barriers and utilize hospital grade mufflers on compressors to reduce noise levels and emissions while conducting its operations in populous urban areas.

**16. Seismic Operations.** Lessee shall pay for all damages incurred to the leased premises which result from its seismic operations. Other than seismic operations as provided herein, by execution and delivery of this Lease, Lessee does not otherwise obtain the right to conduct exploration, excavation or drilling operations from or upon the surface of any portion of the leased premises.

**17. Local Ordinances.** In conducting its operations hereunder, Lessee shall comply with all ordinances, rules or regulations imposed by the City of Fort Worth or other governmental agency which are in effect as of the date of this lease.

**18. Regulation and Delay.** Lessee's obligations under this lease, whether express or implied, shall be subject to all applicable laws, rules, regulations and orders of any governmental authority having jurisdiction, including restrictions on the drilling and production of wells, and regulation of the price or transportation of oil, gas and other substances covered hereby. When drilling, reworking, production or other operations are prevented or delayed by such laws, rules, regulations or orders, or by inability to obtain necessary permits, equipment, services, material, water, electricity, fuel, access or easements, or by fire, flood, adverse weather conditions, war, sabotage, rebellion, insurrection, riot, strike or labor disputes, or by inability to obtain a satisfactory market for production or failure of purchasers or carriers to take or transport such production, or by any other cause not reasonably within Lessee's control, this lease shall not terminate because of such prevention or delay, and, at Lessee's option, the period of such prevention or delay shall be added to the term hereof. Lessee shall not be liable for breach of any provisions or implied covenants of this lease when drilling, completion, production or other operations are so prevented or delayed. Lessor hereby agrees that, in the event Lessee deems it necessary to seek a variance, waiver or other relief from any laws, rules, regulations, or orders (which for purposes of this paragraph shall include any ordinance) or other such authority exercised by (i.) the City of Fort Worth, including but not limited to the well setback distance for gas drilling and production, or (ii.) by any other governmental entity or authority having jurisdiction, then Lessor shall engage in reasonable acts and execute and deliver such instruments and documents Lessee deems necessary or convenient in seeking such relief. In the event Lessee is required by such authority to acquire Lessor's consent as a prerequisite to obtain such variance, waiver or other relief, Lessor grants to Lessee and agrees that Lessee's leasehold estate acquired hereunder includes the right to utilize this lease as Lessor's consent and ratification of any subsequent variance, waiver or other relief Lessee seeks, without the necessity of Lessee

Project: River Trails  
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Lease Id: 25343  
Project: KVIC Train  
The undersigned agrees not to execute documents or instruments or

obtaining any additional or subsequent consent/s from Lessor. Lessor furthermore agrees not to execute, assume, engage in acts that would diminish or adversely affect the relief Lessee is seeking.

19. Lessee is hereby given the exclusive option to extend the primary term of this lease for an additional two (2) years from the expiration of the original primary term plus any extension of the primary term extended under any lease provision contained herein. This option may be exercised by Lessee at any time during the last year of the original primary term, plus any extension periods, by paying to Lessor, herein, or their heirs, successors or assigns, the sum of Six Thousand Six Hundred Sixty Seven and No./100 Dollars (\$6,667.00) per net mineral acre. Lessee shall exercise such option by placing written notice of such election along with the payment in the U.S. Mail, postage prepaid, to Lessor at the above addresses, or by delivery of such notice and payment to Lessor, in either case, prior to the end of the primary term hereof, or if drilling operations are being conducted on the leased premises or upon lands pooled therewith at the expiration of the primary term in such manner as to maintain this lease in force, within thirty (30) days after the completion of the relevant operations. This option shall be deemed to be properly, timely and fully exercised if payment is forwarded by Lessee to Lessor's last known address on or before the expiration of the primary term or any extension thereof, either by, (i.) U.S. Mail, (ii.) Overnight Delivery Service, or (iii.) by personal delivery.

20. Lessor shall have the right to repossess the leased premises in the event of non-payment of rent or other amounts due, or for failure or cancellation with respect to any breach or

Mail, (ii.) Overnight Delivery Service, or (iii.) by personal delivery.

20. Breach or Default. No litigation shall be initiated by Lessor for damages, forfeiture or cancellation of this lease by Lessee hereunder, for a period of at least 90 days after Lessor has given Lessee written notice fully describing the breach or default, and then only if Lessee fails to remedy the breach or default within such period. In the event the matter is litigated and there is a final judicial determination that a breach or default has occurred, this lease shall not be forfeited or cancelled in whole or in part and the final judicial determination to remedy the breach or default and Lessee fails to do so.

is a final judicial determination that a breach or default has occurred, and Lessee fails to do so, unless Lessee is given a reasonable time after said judicial determination to remedy the breach or default and Lessee fails to do so.

21. **Warranty of Title.** Lessor hereby agrees to defend title conveyed to Lessee hereunder, and agrees that Lessee at Lessee's option may pay and discharge any taxes, mortgages or liens existing, levied or assessed on or against the leased premises. Lessee agrees to pay for the costs of any lien subordination that Lessee may request from Lessor's lender. If Lessee exercises such option, Lessee shall be subrogated to the rights of the party to whom payment is made, and, in addition to its other rights, may not reimburse itself out of any royalties or shut-in royalties otherwise payable to Lessor hereunder. In the event Lessee is made aware of any claim inconsistent with Lessor's title, Lessee may suspend the payment of royalties and shut-in royalties hereunder, without interest, until Lessee has

any royalties or shut-in royalties due under this Agreement, with Lessor's title, Lessee may suspend the payment of royalties and shut-in royalties hereunder, without interest, until Lessor has furnished satisfactory evidence that such claim has been resolved.

22. Other than Lessors gross negligence or willful misconduct, Lessee agrees to indemnify and hold Lessor harmless from any and all claims, costs, expenses, damages, losses, actions, suits, claims or judgments of any kind or character for injury

22. Other than Lessee's gross negligence or willful  
liability, damages, reasonable attorney's fees, expenses, causes of action, suits, claims or judgments of any kind or character, for  
to persons or property caused by Lessee's operations on the subject land.

any such arbitration, the decision shall be binding.

IN WITNESS WHEREOF, this lease is executed to be effective as of the date first written above, but upon execution shall be binding on the signatory and the signatory's heirs, devisees, executors, administrators, successors and assigns, whether or not this lease has been executed by all parties hereinabove named as Lessor.

IN WITNESS WHEREOF this instrument is executed on the date first above written.

LESSOR: Philip C. Armstrong

LESSOR: Amanda L. Armstrong

Signature:   
Individually and in all Capacities for the above described Land

Title: lessor

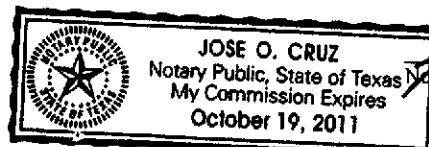
Signature Amanda Austin  
Individually and in all Capacities for the above described Land

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#### ACKNOWLEDGEMENTS

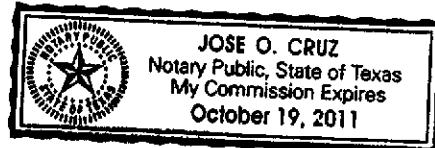
STATE OF TEXAS  
COUNTY OF TARRANT

This instrument was acknowledged before me on the 9<sup>th</sup> day of February, 2008, by



STATE OF TEXAS  
COUNTY OF TARRANT

This instrument was acknowledged before me on the 9<sup>th</sup> day of February, 2008, by



Project: River Trails  
Lease Id: 25343

EXHIBIT "A"

ATTACHED TO AND MADE A PART OF THAT CERTAIN OIL AND GAS LEASE DATED February 9, 2008, BY  
AND BETWEEN Philip C. Armstrong and Amanda L. Armstrong, husband and wife, AS LESSOR AND CARRIZO OIL & GAS,  
INC., AS LESSEE.

LEGAL DESCRIPTION

LOT 23, BLOCK 21, OF RIVER TRAILS ADDITION, PHASE III, SECTION SIX, AN ADDITION TO  
THE CITY OF FORT WORTH, TARRANT COUNTY, TEXAS, ACCORDING TO THE PLAT  
THEREOF RECORDED IN CABINET A, SLIDE 5577, OF THE PLAT RECORDS OF TARRANT  
COUNTY, TEXAS.

Addendum

**I. DEFINITIONS**

As used herein, "River Trails" includes the area bordered by the following:

North: by Trinity Boulevard;  
East: Precinct Line Road  
South: by Saranac Trail  
West: by Salado Trail

Lessee shall hire an independent surveyor to conduct the survey, and shall pay all expenses associated with the survey. Attached hereto as Exhibit "B" is a map of the area comprising "River Trails" as defined herein.

For the same consideration stated above, Lessor agrees and does hereby communitize their mineral interest in the "River Trails" Subdivision with all other mineral owners in the "River Trails" Subdivision entering into a Carrizo lease which contains a similar communization provision. Such communization shall be based upon a fraction with a numerator reflecting the amount of net mineral acres contributed by each respective communizing Lessor and a numerator reflecting the total number of acres covered by the "River Trails" Subdivision which for the purposes of this provision shall be deemed to contain 297 acres of land, more or less. It is expressly understood and agreed, in the event all or part of the Lease is released and/or the Lease fully or partially expires, that each respective communizing Lessor shall own their respective and separate mineral interest, which is so released or which expires, in the same manner and/or proportion as immediately prior to the date of execution of this lease as fully as though this lease had never been executed. Pooling all or part of River Trails Subdivision shall perpetuate the mineral interest covered by this lease pursuant to the pooling provision contained herein. Any non released and/or non expiring mineral interest cover by this lease shall continue to be administered as a communized mineral interest under this provision. .